

CLAIM AMENDMENTS

Please amend the following claims as indicated:

b 1 1. (currently amended) A brake pad assembly for a bicycle having a brake system urging the pad assembly against the rim of the bicycle wheel, the combination comprising:

an elongate support member having a longitudinally extending planar brake shoe supported therefrom for receiving multiple individually molded brake pads;  
~~said brake pads abutting individual brake pads molded as unitary members sequentially and slidably positioned within said brake shoe in abutting relationship with each formed of a different braking compound having pre-selected braking characteristics for imparting a variety of desired braking characteristics to said brake pad assembly; and~~

~~said brake shoe means and said brake pads are configured for interchangeability and replacement of said brake pad within said brake shoe means.~~

2. (currently amended) The brake pad assembly according to Claim 1 wherein each of said pads has a rim engaging surface generally coplanar with the other ~~and each is formed of a different braking compound for imparting a different braking characteristic to said brake assembly.~~

3. (currently amended) The brake pad assembly according to Claim 1 ~~2~~ wherein each said brake pad is comprised of a ~~first~~ top portion for mounting into in said brake shoe and a ~~second~~ bottom portion extending from said brake shoe, said bottom portion and having a braking surface for contact with said bicycle wheel rim, said top portion and said bottom portion the portions defined by an indentation along each non-abutting longitudinal side on each side of said brake pad.

4. (currently amended) The brake pad assembly according to Claim 3 wherein said brake shoe includes ~~brake pad~~ locking means for fixedly positioning said ~~interchangeable~~ brake pads therein aligned relative to one another and relative to said brake shoe, said locking means including capture means in said longitudinally extending brake shoe for coacting interaction with said indentations in said pad to slidably receive and restrain said top first portion of each said brake pad.

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5. (currently amended) The brake pad assembly according to Claim 4 wherein said capture means includes is comprised of inwardly projecting shoulders in said brake shoe for coacting mating with said indentations, and said locking means further includes a groove in at least one of said brake pads and a locking pin, and said brake shoe, said groove and said locking pin are configured for mating coacting engagement whereby said individual brake pads are further fixedly positioned within said brake shoe .

6. (currently amended) The brake pad assembly according to Claim 1 2 wherein the composition of said brake pads is formed of variations of multi-rubber or elastomeric compounds, and wherein said brake shoe has longitudinal transverse curvature substantially in conformance with the radius of the bicycle wheel rim.

7. (currently amended) The brake pad assembly according to Claim 2 wherein each of said brake pads is molded as a unitary member formed of variations of multi-rubber or elastomeric compounds and said brake shoe includes locking means for positioning and restraining said brake pads therein;

    said locking means includes inwardly projecting shoulders in said brake shoe with and mating indentations in said brake pads, said brake shoe for slidably receiving said brake pads along said shoulders in said brake shoe; and

    said locking means further includes a groove in at least one of said brake pads and a locking pin for coacting engagement whereby said brake pads are captured within said brake shoe .

8. (currently amended) A brake pad assembly for a bicycle having a brake system urging a brake shoe against the rim of the bicycle wheel, the assembly comprising:

    a bicycle brake shoe having a plurality of unitary abutting brake pads sequentially positioned therein, each having a rim engaging braking surface generally coplanar with the other and each being formed of a different multi-rubber or elastomeric compound, each compound being pre-selected for imparting a different braking characteristic to said brake system; and

    each of said brake pads configured for slidable interchangeability and replacement within said brake shoe means; and

said brake shoe has longitudinal curvature substantially in conformance with the radius of the bicycle wheel rim.

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9. (currently amended) The brake pad assembly according to Claim 8 wherein each of said plurality of brake pads is comprised of a top portion and a bottom portion, the portions defined by an indentation on each non-abutting side of said brake pad; and

    said brake shoe includes inwardly projecting shoulders configured for coacting mating with said brake pad indentations whereby said brake pads are slidably received along said shoulders in said brake shoe, with said top portion captured in said brake shoe and said bottom portion extending from said brake shoe with and having a braking surface for contact with said bicycle wheel rim.

10. (currently amended) The brake pad assembly according to Claim 9 wherein said brake shoe includes locking means for capturing and retaining said plurality of brake pads in abutting arrangement within said brake shoe, said locking means including a first locking component and at least one of said brake pads includes a second locking component, said first and second locking components being configured for coacting engagement whereby said plurality of brake pads are captured within said brake shoe.

11. (cancelled) The brake pad assembly according to Claim 10 wherein said locking means includes a first locking component and at least one of said brake pads includes a second locking component, said first and second locking components being configured for coacting engagement whereby said plurality of brake pads are captured within said brake shoe.

12. (currently amended) The brake pad assembly according to Claim 10 ~~++~~ wherein said first locking component includes insert means and said second locking component includes at least one of said plurality of brake pads having recessed means therein, said insert means and said recessed means configured for mating coacting engagement whereby said brake pads are locked in said brake shoe .

13. (currently amended) The brake pad assembly according to Claim 10 ~~++~~ wherein ~~said brake shoe has transverse curvature substantially in conformance with the radius of the bicycle wheel~~

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rim, and said plurality of brake pads are retained in alignment relative to one another and relative to said brake shoe.

14. (currently amended) The brake pad assembly according to Claim 10 9 wherein said first locking component is a locking pin and said second locking component is a groove in at least one of brake pads, said locking pin and said groove configured for mating coacting engagement whereby said individual brake pads are fixedly positioned and captured within said brake shoe.

15. (currently amended) A brake shoe assembly for a bicycle having a brake system urging a brake shoe against the rim of the bicycle wheel, the assembly comprising:

an elongate longitudinally extending brake shoe for receiving a plurality of individually molded brake pads in abutting arrangement sequentially positioned within said brake shoe, each having a ~~rim engaging braking surface generally coplanar with the other and having~~ pre-selected braking characteristics for imparting a variety of braking characteristics to said brake pad assembly, said brake shoe and said brake pads configured for slideable replacement and interchangeability of said brake pads within said brake shoe; and

each of said plurality of brake pads is comprised of a top portion and a bottom portion defined by indentations in an indentation on each non-abutting side of said brake pad and said brake shoe includes inwardly projecting shoulders configured for coacting engagement mating with said indentations whereby said brake pads are slidably received along said shoulders, said top portion contained within said brake shoe by said shoulders and said bottom portion extending from said brake shoe and having a braking surface for contact with said bicycle wheel rim; and  
said brake shoe having longitudinal curvature substantially in conformance with the radius of the bicycle wheel rim.

16. (currently amended) The brake pad assembly according to Claim 15 wherein each of said brake pads pad is molded as an individual unitary member of variations of multi-rubber or elastomeric compounds for imparting a variety of braking characteristics.

17. (currently amended) The brake pad assembly according to Claim 15 wherein each of said brake pads pad is formed of a different braking compound for imparting a different braking characteristic to said brake assembly.

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18. (currently amended) The brake pad assembly according to Claim 15 wherein said assembly includes locking means for capturing and retaining said interchangeable brake pads within said longitudinally extending brake shoe aligned relative to one another and to said brake shoe;

~~each of said brake pads is comprised of a first top portion for mounting in said brake shoe and a second bottom portion extending from said brake shoe, the portions defined by an indentation on each side of said brake pad;~~

~~said locking means including capture means comprised of said inwardly projecting shoulders in said brake shoe coacting with said indentations to slidably receive and restrain said first portion of each said brake pad within said brake shoe, and further including first locking means in said brake shoe and second locking means in at least one of said pad portions, said first and second locking means configured for mating coacting engagement to further capture and retain whereby said plurality of brake pad portions are captured and retained within said brake shoe..~~

19. (currently amended) The brake pad assembly according to Claim 18 wherein said first locking means is a groove in at least one of said brake pads and said second locking means is a locking pin for mating coacting engagement with said first locking means whereby said brake pad portions are positioned, captured and retained within said brake shoe.

20. (currently amended) The brake pad assembly according to Claim 18 wherein each said brake pad has a rim engaging surface generally coplanar with the other, ~~said brake shoe has transverse curvature substantially in conformance with that of the radius of the bicycle wheel rim, and each said brake pad is aligned relative to the other and relative to said brake shoe.~~